Chapter 1

Introduction

1.1 Introduction

Job satisfaction is an attitude that employees have about their work and is based on numerous factors, both intrinsic and extrinsic to the individual. Satisfied employee can increases productivity, morale, enhance organizational commitment, decrease turnover and absenteeism rate and ultimately, increase organizational effectiveness and performance (Locke, 1976). Job satisfaction inevitably affects the retention of appropriate employees within the organization. Hence, it is a very important attribute which is frequently measured by organizations and researchers.

Despite the obvious importance and consequences, inadequate attention has been focused on what are the factors that influence job satisfaction among Royal Malaysian Air Force (RMAF) personnel, especially those working in the Air Defence units. According to Human Resource Department in RMAF, there was only one study of job satisfaction on Air Traffic Controllers / Officer done in year 2000 and no one has developed an empirical model to analyze the antecedents of job satisfaction among the officers and other ranks serving in the air defence unit. This oversight is especially glaring as Air Defence personnel are the vanguards who are responsible to maintain the sovereignty and integrity of Malaysian airspace. They are known to be "eye of the sky for the nation" as they have to work 24 hours shift throughout the year. Indeed some of them have to be stationed in remote and rural radar site to carry out the formidable tasks. Inevitably, this

will have some negative impact upon on life satisfaction that in turn will lead job dissatisfaction (Judge, Hanisch and Drankoski, 1995).

1.2 Background

The Royal Malaysian Air Force (RMAF) is one of the three components of the Malaysian Armed Forces. It had its genesis in 1958 (Nordin and Razak, 1993); a year after Malaysia gained its independence from the British. When it was first formed, it was only equipped with a propeller driven aircraft. To date, it had grown into a credible force with the state of art military aircraft and Air Defence Ground Environment (ADGE) system tasked to maintain the sovereignty, integrity of Malaysian airspace and strategic interests of the country.

In order to execute its mission of maintaining the sovereignty and integrity of Malaysia airspace, one of RMAF main responsibility is airspace control. Airspace control involves air operations conducted by the combined efforts of the Airspace Management and Control system and the weapon system organization to achieve control of the airspace without prejudice from enemy air power. These air operations include Offensive Counter Air (OCA), Defensive Counter Air (DCA) and Suppression of Enemy Air Defence (SEAD). A well organized and coordinated effort of total airspace power would include weapon system, command, control, communication and intelligence (C31) system, identification, detection, interception, early warning, destruction, surveillance and most importantly an effective ADGE (RMAF Aerospace Management and Control Operation Doctrine, Confidential, 1996).

An ADGE system is defined as the part of command and control system consisting of integrated communication, sensors, data processing and display equipment and facilities is designed to support the direction and control of air defence operations.

1.2.1 Airspace Management and Control in Air Defence Operations.

The Airspace Management and Control in air defence operations provides a system that collate information from a variety of land-based long range air defence radar and distributes them to the commander to enable appropriate actions to be taken. It provides the organizational framework to facilitate centralized control of dedicated and assigned air assets to be exercised at the highest level and decentralized execution to be carried out at the tactical levels.

To fulfill the basic functions of Airspace Management and Control system which includes detection, identification, interception and destruction and communications, this Airspace Management and Control system has been assigned to Control and Reporting (C&R) personnel in designated Air Defence Units to carry out the following primary roles:

a. Surveillance. The conduct of air surveillance in national airspace and areas of interest involves the process of detection, track initiation, height finding, tracking, and identification of all airborne objects detected within the airspace. The successful prosecution of air defence operation is dependent upon the early detection and identification of the enemy air activities. An effective air defence system must therefore include extensive surveillance

capabilities that can provide information of any air activities in the area of interest. It must not be interrupted and needs to be continuous. Primarily, the surveillance tasks are conducted by Non-commissioned Officers of the C&R Trade and Airman of the C&R Trade in various Air Defence Units.

b. Threat Evaluation and Weapon Assignment (TEWA). This process involves the assessment and evaluation of the overall airspace situation available at the command and control centre. All airborne objects detected by Radar will be identified and classified. Appropriate tactical actions will be taken against potential threat in accordance with their priority and positions. The battle executive responsible for this function will select and commit the appropriate weapon that can best neutralize the threat. This responsibility is generally executed by senior and qualified officers of the Control and Reporting (C&R) specialization in Air Defence Centre (ADC). Generally, these officers who hold the rank of Major and above and had undergone various specialized air defence courses.

c. Weapon Control. The conduct of weapon control involves the management and coordination of all air defence weapon available. The weapon systems comprise of manned interceptors or fighter aircraft equipped with air-to-air missiles (AAM) and guns, ground based air defence (GBAD) system that consists surface to air missiles (SAM) and anti aircraft artillery (AAA). This process also involves controlling and directing the assigned fighter aircraft towards terminal phase of intercepting and destroying the

potential air threat. The fighter control function is the responsibility of qualified officers of C&R specialization who hold the rank of Major and below.

1.2.2 Air Defence Organization

The air defence operations is organized into different command and control system to facilitate centralized command of dedicated and assigned air assets to be exercised at the highest level and decentralized execution to be carried out at the tactical level. However, the air defence operation in peacetime is differing in scope and nature from those that are required in wartime or under conflict situation. It is therefore necessary that organization be established to meet both situations.

During peace time or day to day normal operation, the operational command and control organization of air defence operation is as shown in figure 1.2.2(a) Fighter squadrons, GBAD system, and air defence units will operate autonomously but remain under the command of Air Division headquarter.



Figure 1.2.2(a): Operational Command and Control Organization in Peacetime

The functional command and control of air defence organization during wartime or conflict situation of air defence operation is as shown in figure 1.2.2(b) below. The functional roles of the air defence units and its organizational structure vary to suit the operational requirement.



Figure 1.2.2(b): Functional Command and Control under Wartime Conditions

1.2.3 Air Defence Unit Organization

Air defence units are established under C&R branch in RMAF organization. There are a total of eight air defence units in which six units are in Peninsular Malaysia and the remainders two are in Sabah and Sarawak. The roles and functions of each unit differ according to the operational requirements, inherent authority and the facilities in the unit. Each unit is designated with a squadron number and the locality is shown in Figure 1.2.3.



Figure 1.2.3: Air Defence Units and Locality.

1.2.4 Air Defence Operators

Air defence operators consist of air force commissioned officer of C&R specialization, non-commissioned officers of the C&R trade and airman of the C&R trade. The officers are mainly responsible for threat evaluation and weapon assignment (TEWA), controlling and directing of assigned fighter aircraft to intercept and destroy potential hostile aircraft. The non-commissioned officers and airman are responsible for surveillance section that includes track initiation, assigned track number, identification of the track and flight follow.

1.2.5 Air Defence Operators Working Hours

As mentioned before, air defence operation must not be interrupted and needs to be continuous. All air defence units are manned 24 hours to ensure constant vigilance within its area of responsibility. As such, the working hour is divided into 3 shift system employing two working shifts and one off shift. The day shift works from 0800 to 1800 (10 hours) for two days and then works a night shift from 1800 to 0800 (14 hours) for two days and then gets a day off and one day rest. These shift workers are at their place of work for 240 hrs in a month. According to The Employment Act, (1995) Part XII para 60A (1) clearly explains the provisions for working hours of an employee. Here it states that the employee should not work more than 8 hours a day, 44 hours per week and 176 hours per month. By comparison, the air defence operator works an extra of 64 hours per month on the average.

1.3 **Problem Statement**

There were numerous researches in a variety of occupational settings that assess the ways in which work environment and demographic factors affect employee job satisfaction. Unfortunately, there is no research conducted on air defence unit. There is a significant problem arising in these units as denoted by the increased number of grievances related to work, poor work performance, misconduct or discipline cases, stress-related medical problems and increased applicants for early retirement from RMAF unit's personnel as reported by Staff Officer Grade 1, C&R Branch Ministry of Defence (No 1 Air Div Annual Report, 2006) . It is undoubtedly that the

unit's Commanding Officer and the RMAF has taken various human resource management measures to motivate and improve the wellbeing of airman, for example improve staffs living quarters, elimination of trivial and unnecessary rules and regulations and hasten promotion opportunities. Despite these measures taken, yet these undesirable occurrences are still being reported. Although there are no available empirical data to explain the root cause to these occurrences, it could be related to job dissatisfaction (Spector, 1997).

For the past few years, one of the concerns confronting air defence units in RMAF has been a shortage of qualified air defence officers and other ranks. According to Staff Officer 2 of Human Resource Department of RMAF, the overall shortage of air defence officers and other ranks as at 1 July 2009 is 12 % and 19.4% respectively. He stated that efficiency and performance of an individual air defence unit are dependent upon adequate supply of qualified operators and effective training programs conducted by Air Defence School to generate qualified air defence operators in various specializations. However, some trained operators left the air defence unit after they have served their term of service or some chose for early retirement. When trained air defence operators leave the organization, it is an implication and indication of job dissatisfaction (Spector, 1997). It is widely believed that a significant amount of turnover adversely influences organization effectiveness (Hom and Kinichi, 2001). The consequence of job turnover among the air defence operators has increased RMAF's operation cost for the continual training of new operators. In addition, when unit is short of manpower, the existing staff has to carry out additional duty and increase their rate of effort in order to

accomplish the unit assigned function. If this situation persists, it would most likely lead to job dissatisfaction. Therefore, more research is required to study this phenomenon of job dissatisfaction among the RMAF air defence personnel and whether the work environment factors affect job satisfaction.

Bartol (1979) reported that there was a low, but consistent positive correlation between job dissatisfaction and several factors, one of which was the extended working hours required by the nature of work. This finding could be related to air defence operators who have to work an extra 64 hours per month due to the nature of shift system adopted. The long working hours could strain their personal lives and affect their morale. Besides, the additional working hours, the air defence operators are constantly faced with other job demands as well as intense pressure from the superior to achieve a performance culture unit. Thus, eventually the air defence operators will experience "burn out" syndrome due to long working and considerable stress. If job dissatisfaction is not addressed accordingly, inevitably it will affect the air defence operators' efficiency and effectiveness to carry out their duties to maintain the sovereignty and integrity of Malaysian airspace. Therefore, it is worthwhile to study job satisfaction among the air defence operators.

1.4 Objectives of the Study

The purpose of this study is to gauge the level of job satisfaction of air defence operators in the RMAF and to examine factors that affect job satisfaction. To guide this study, the following research objectives are formulated:

1. To assess the level of the air defence operators overall job satisfaction.

2. To examine the relationship of hygiene factors (which includes monetary rewards, supervisor-subordinate relationship, relationship with peer, policy and administration, working conditions) and job satisfaction.

3. To examine the relationship of motivation factors (which includes achievement, recognition, work itself, responsibility, and advancement) and job satisfaction.

4. To examine the relationship between personal characteristics of air defence operators and their job satisfaction.

1.5 Significance of the Study

This study would contribute to the knowledge of job satisfaction in general and specifically, on air defence operators in the RMAF. Air defence operators are the vanguards who are responsible to maintain the sovereignty and integrity of Malaysian airspace. If job dissatisfaction does exist among them, inevitably, this would greatly affect the safety and security of the nation. Hence it is of utmost importance that their interest are being cared for to facilitate job commitment and job performance.

This study would provide information that is important to air defence administration, practice, and training. The Commanding Officer and unit executive could use this information to build solid and supportive units. The findings of the study could assist RMAF in formulating policies and strategies that would help to improve overall job satisfaction by removing organizational obstacles to optimize organizational performance and airman attitudes.

1.6 Scope and Limitations

The scope of this study focuses on job satisfaction among the air defence operators through an examination of the relationship between Herberg's motivation and hygiene factors and their overall job satisfaction. The study used a non-experimental, structured questionnaire design with a theoretical framework based on Herzberg's Motivation versus Hygiene theory. The independent variables are motivation and hygiene factors, and the dependent variable is job satisfaction. Personal characteristics that are related in RMAF personnel will also be used as independent variables to study job satisfaction.

Time is a severe limitation in the conduct of this research. Due to time limitation, this study is confined to air defence units within the Peninsular Malaysia.

1.7 Organization of the Study

This study is organized into five chapters. Chapter 1 is the introductory chapter. It highlights the importance of job satisfaction in air defence operators. It also describes briefly the concept of air defence operations and its organization. Following that, the problem statement, research objectives, significance of the study, scope and limitations are presented in this chapter.

Chapter 2 reviews some of the available literature on job satisfaction, which highlights several theories of motivation related to job satisfaction. Research framework and development of hypothesis that includes job environmental antecedents and personal characteristic are extensively discussed.

Chapter 3 discusses the research methodology used in this study. The research design is briefly mentioned. The instruments and measurements used in this research that includes reliability, validity and scaling of measurement are highlighted in this chapter. The study setting, data collection procedures, sample design and data analysis technique are also presented in this chapter.

Chapter 4 reports the research findings and chapter 5 concludes the study and suggests recommendations to improve the job satisfaction levels of air defence operators.

1.8 Summary

Air defence operators are the vanguards responsible to maintain the sovereignty and integrity of Malaysian airspace. If job dissatisfaction does exist among them, this would inevitably affect the safety and security of the nation. Hence, it is of utmost importance to examine the factors that directly or indirectly influenced the air defence operators' job satisfaction. The results of the study would provide information that is important to air defence administration, practice, and training. It could also assist RMAF in formulating policies and strategies that would help to improve overall job satisfaction.